#### 502237312 02/20/2013

### PATENT ASSIGNMENT

## Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
Marc E. Davis	02/01/2013
Matthew G. Dyor	09/10/2012
Daniel A. Gerrity	10/10/2012
Xuedong Huang	11/29/2012
Roderick A. Hyde	10/17/2012
Royce A. Levien	12/26/2012
Richard T. Lord	08/25/2012
Robert W. Lord	08/25/2012
Mark A. Malamud	08/24/2012
Nathan P. Myhrvold	08/16/2012
Clarence T. Tegreene	08/29/2012

### **RECEIVING PARTY DATA**

Name:	Elwha LLC, A Limited Liability Company of the State of Delaware
Street Address:	11235 SE 6th Street
City:	Bellevue
State/Country:	WASHINGTON
Postal Code:	98004

### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13538385

### CORRESPONDENCE DATA

Fax Number: 3606277147

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Email: admin@constellationlaw.com Correspondent Name: Constellation Law Group PLLC

Address Line 1: P.O. Box 220

**PATENT** 

REEL: 029843 FRAME: 0521

502237312

Address Line 4: Tracyton, WAS	SHINGTON 98393	
ATTORNEY DOCKET NUMBER:	SE1-0548-US	
NAME OF SUBMITTER:	Dale C. Barr	
Total Attachments: 45		
source=SE1-0548-US_Executed_Assignment	ents#page1.tif	
source=SE1-0548-US_Executed_Assignment	ents#page2.tif	
source=SE1-0548-US_Executed_Assignment	ents#page3.tif	
source=SE1-0548-US_Executed_Assignment	ents#page4.tif	
source=SE1-0548-US_Executed_Assignment	ents#page5.tif	
source=SE1-0548-US_Executed_Assignment	ents#page6.tif	
source=SE1-0548-US_Executed_Assignment	ents#page7.tif	
source=SE1-0548-US_Executed_Assignment	ents#page8.tif	
source=SE1-0548-US_Executed_Assignment		
source=SE1-0548-US_Executed_Assignment	. •	
source=SE1-0548-US_Executed_Assignment	· ·	
source=SE1-0548-US_Executed_Assignment		
source=SE1-0548-US_Executed_Assignment	• •	
source=SE1-0548-US_Executed_Assignment		
source=SE1-0548-US_Executed_Assignment	. •	
source=SE1-0548-US_Executed_Assignments#page16.tif		
source=SE1-0548-US_Executed_Assignments#page17.tif		
source=SE1-0548-US_Executed_Assignme	. •	
source=SE1-0548-US_Executed_Assignme	• •	
source=SE1-0548-US_Executed_Assignments#page20.tif		
source=SE1-0548-US_Executed_Assignments#page21.tif		
source=SE1-0548-US_Executed_Assignments#page22.tif		
source=SE1-0548-US_Executed_Assignments#page23.tif		
source=SE1-0548-US_Executed_Assignments#page24.tif		
source=SE1-0548-US_Executed_Assignme	. •	
source=SE1-0548-US_Executed_Assignments#page26.tif		
source=SE1-0548-US_Executed_Assignme		
source=SE1-0548-US_Executed_Assignments#page28.tif source=SE1-0548-US_Executed_Assignments#page29.tif		
source=SE1-0548-US_Executed_Assignmesource=SE1-0548-US_Executed_Assignmesource=SE1-0548-US_Executed_Assignments	• •	
source=SE1-0548-US_Executed_Assignme		
source=SE1-0548-US_Executed_Assignment	• •	
source=SE1-0548-US_Executed_Assignme		
source=SE1-0548-US_Executed_Assignment	• •	
source=SE1-0548-US_Executed_Assignment		
source=SE1-0548-US_Executed_Assignme		
source=SE1-0548-US_Executed_Assignme	· -	
source=SE1-0548-US_Executed_Assignme	• •	
source=SE1-0548-US_Executed_Assignment	• •	
source=SE1-0548-US_Executed_Assignme		
source=SE1-0548-US_Executed_Assignments#page42.tif		
source=SE1-0548-US_Executed_Assignments#page43.tif		
source=SE1-0548-US_Executed_Assignments#page44.tif		
source=SE1-0548-US_Executed_Assignment	• •	

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said

invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

02/	0)	12013
Date /		, <u> </u>

2

Marc E. Davis 444 Mississippi Street, San Francisco CA 94107

Date	Matthew G. Dyor 1646 184th Avenue NE, Bellevue WA 98008
Date	Daniel A. Gerrity 1107 Lakeside Ave S, Seattle WA 98144
Date	Xuedong Huang 6179 155th Avenue SE, Bellevue WA 98006

Page 2 of 4

Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
 Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
	Nathan D.M. Land H.
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

Date	Clarence T. Tegreene
	5910 E Mercer Way, Mercer Island, WA 98040

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor. Marc E. Davis Date 444 Mississippi Street, San Francisco CA 94107 9/10/12 Matthew G. Dyor Date 1646 184th Avenue NE, Bellevue WA 98008 Daniel A. Gerrity Date 1107 Lakeside Ave S, Seattle WA 98144

> Xuedong Huang 6179 155th Avenue SE, Bellevue WA 98006

Date

Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

910 E Mercer Way, Mercer Island, WA 98040

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

PATENT

REEL: 029843 FRAME: 0531

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor. Date Marc E. Davis 444 Mississippi Street, San Francisco CA 94107 Date Matthew G. Dyor 1646 184th Avenue NE, Bellevue WA 98008 10/10/2012 Daniel A. Gerrity Date 1107 Lakeside Ave S, Seattle WA 98144

Date

**Xuedong Huang** 

6179 155th Avenue SE, Bellevue WA 98006

Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

5910 E Mercer Way, Mercer Island, WA 98040

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

PATENT

REEL: 029843 FRAME: 0535

issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor. Date Marc E. Davis 444 Mississippi Street, San Francisco CA 94107 Matthew G. Dyor Date 1646 184th Avenue NE, Bellevue WA 98008 Daniel A. Gerrity Date 1107 Lakeside Ave S, Seattle WA 98144 11.29.2012 Date Xuedong Huang

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to

6179 155th Avenue SE, Bellevue WA 98006

Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

Date	Clarence T. Tegreene
	5910 E Mercer Way, Mercer Island, WA 98040
SE1-0548-US Assignment	

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor. Date Marc E. Davis 444 Mississippi Street, San Francisco CA 94107 Date Matthew G. Dyor 1646 184th Avenue NE, Bellevue WA 98008 Date Daniel A. Gerrity

Date

Xuedong Huang 6179 155th Avenue SE, Bellevue WA 98006

1107 Lakeside Ave S, Seattle WA 98144

10/17/2012	Rodouch a delle
Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
D.4.	Dobout W. Loud
Date	Robert W. Lord 1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SF 6th Street Suite 200 Rellevue WA 98004

Date	Clarence T. Tegreene
	5910 E Mercer Way, Mercer Island, WA 98040

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

Date

Marc E. Davis

444 Mississippi Street, San Francisco CA 94107

Date Matthew G. Dyor

1646 184th Avenue NE, Bellevue WA 98008

Date Daniel A. Gerrity
1107 Lakeside Ave S, Seattle WA 98144

Date Xuedong Huang

Xuedong Huang 6179 155th Avenue SE, Bellevue WA 98006

Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
2012-12-26	12 a
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

5910 E Mercer Way, Mercer Island, WA 98040

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor. Date Marc E. Davis 444 Mississippi Street, San Francisco CA 94107 Date Matthew G. Dyor 1646 184th Avenue NE, Bellevue WA 98008 Date Daniel A. Gerrity 1107 Lakeside Ave S, Seattle WA 98144 Date Xuedong Huang

Page 2 of 4

6179 155th Avenue SE, Bellevue WA 98006

Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
8/25/2012	Richard T. Har
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud 1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

Date	Clarence T. Tegreene
	Clarence 1. Tegicene
	5910 E Mercer Way, Mercer Island, WA 98040

SE1-0548-US Assignment

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

PATENT

REEL: 029843 FRAME: 0551

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor. Date Marc E. Davis 444 Mississippi Street, San Francisco CA 94107 Date Matthew G. Dyor 1646 184th Avenue NE, Bellevue WA 98008 Date Daniel A. Gerrity 1107 Lakeside Ave S, Seattle WA 98144 Date Xuedong Huang

Page 2 of 4

6179 155th Avenue SE, Bellevue WA 98006

***************************************	-
Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
8/25/2012	<u> </u>
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

Date	Clarence T. Tegreene
	5910 E Mercer Way, Mercer Island, WA 98040

# **DECLARATION OF RICHARD T. LORD**

I, Richard T. Lord, hereby attest that the mark on the attached Declaration for Utility Patent Application is the mark of my son, Robert W. Lord.

DATED this 25th day of August, 2012.

Richard T. Lord

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor. Date Marc E. Davis 444 Mississippi Street, San Francisco CA 94107 Date Matthew G. Dyor 1646 184th Avenue NE, Bellevue WA 98008 Date Daniel A. Gerrity 1107 Lakeside Ave S, Seattle WA 98144

> Xuedong Huang 6179 155th Avenue SE, Bellevue WA 98006

Date

Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
8-24-12	
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

Date	Clarence T. Tegreene
	5910 E Mercer Way, Mercer Island, WA 98040

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

PATENT

REEL: 029843 FRAME: 0560

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor. Date Marc E. Davis 444 Mississippi Street, San Francisco CA 94107 Date Matthew G. Dyor 1646 184th Avenue NE, Bellevue WA 98008 Date Daniel A. Gerrity 1107 Lakeside Ave S, Seattle WA 98144

> Xuedong Huang 6179 155th Avenue SE, Bellevue WA 98006

Date

Date	Rođerick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
8/16/12	Nation Sylved
Date	Nathan P. Myhrvold

11235 SE 6th Street Suite 200, Bellevue WA 98004

Clarence T. Tegreene
5910 E Mercer Way, Mercer Island, WA 98040

WHEREAS, we, Marc E. Davis, Matthew G. Dyor, Daniel A. Gerrity,

Xeudong Huang, Roderick A. Hyde, Royce A. Levien, Richard T. Lord, Robert W.

Lord, Mark A. Malamud, Nathan P. Myhrvold and Clarence T. Tegreene (hereinafter

referred to as ASSIGNORS), having post office addresses listed below, are the joint

inventors of an invention entitled "NETWORK ACQUIRED BEHAVIORAL

FINGERPRINT FOR AUTHENICATION" as described and claimed in the specification

for which an application for United States letters patent was filed on June 29, 2012 and

assigned Application No. 13/538,385; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited

liability company of the State of Delaware, having a place of business at 11235 S.E. 6<sup>th</sup>

Street, Suite 200, Bellevue, WA 98004, is desirous of acquiring the entire right, title and

interest in and to the invention and in and to any letters patent that may be granted therefore

in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good

and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS

hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and

to said invention, said application and any and all letters patent which may be granted for

said invention in the United States of America and its territorial possessions and in any and

all foreign countries, and in any and all divisions, reissues and continuations thereof,

including the right to file foreign applications directly in the name of ASSIGNEE and to

claim priority rights deriving from said United States application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said

invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns as fully and entirely as the same would have been

held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made.

Page 1 of 4

issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute a			
instruments and documents required for the making and prosecution of applications for			
United States and foreign letters patent on said			
	ng letters patent, or for the purpose of protecting title to said		
invention or letters patent therefore			
invention of fetters patent thereis	or.		
Date	Marc E. Davis		
	444 Mississippi Street, San Francisco CA 94107		
Date	Matthew G. Dyor		
	1646 184th Avenue NE, Bellevue WA 98008		
Date	Daniel A. Gerrity		
	1107 Lakeside Ave S, Seattle WA 98144		
Date	Xuedong Huang		
	6179 155th Avenue SE, Bellevue WA 98006		

Date	Roderick A. Hyde
	9915 161st Avenue NE, Redmond WA 98052
Date	Royce A. Levien
	43 Somerset Road, Lexington MA 02420-3519
Date	Richard T. Lord
	505 Broadway #405, Tacoma WA 98402
Date	Robert W. Lord
	1410 41st Ave East, Seattle WA 98112
Date	Mark A. Malamud
	1508 Ninth Ave W, Seattle WA 98119
Date	Nathan P. Myhrvold
	11235 SE 6th Street Suite 200, Bellevue WA 98004

Clarence T. Tegreene

5910 E Mercer Way, Mercer Island, WA 98040

SE1-0548-US Assignment